ABSTRACT OF THE DISCLOSURE

An image containing data relating to the tissue-state and the tissue-form of a target area is displayed. A fluorescent-light image having two different wavelength bands of fluorescent-light is obtained, based on the strength of the fluorescent light emitted from a target area irradiated by stimulating-light. A reflected-light image is obtained based on the strength of the light reflected from a target area irradiated by white-light as reference-light. A hue is assigned to a computed-image based on a division value of each pixel value of aforementioned fluorescent-light image to form a tissue-state image reflecting mainly the tissue-state, and a brightness is assigned to the reflected-light image to form a tissue-form image reflecting mainly the tissue-form. The tissue-state image and the tissue-form image are combined to form a composite-image, and the composite-image is displayed.